OIPE JC161
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PATENT & TRADEMARK OFFICE

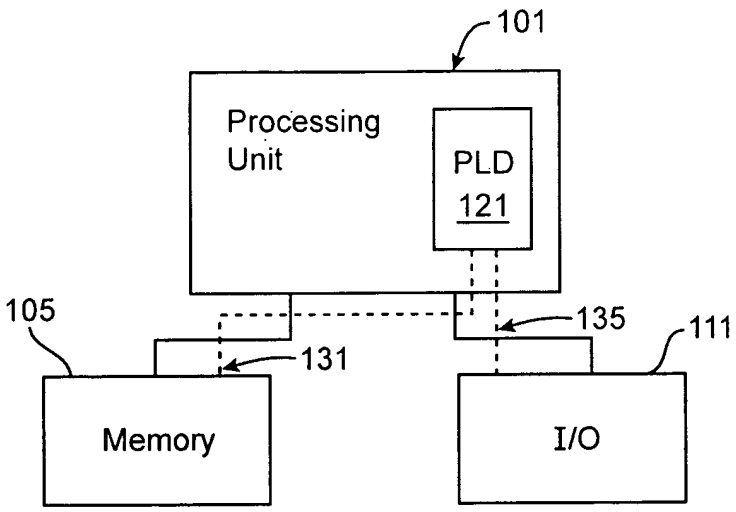

FIG. 1

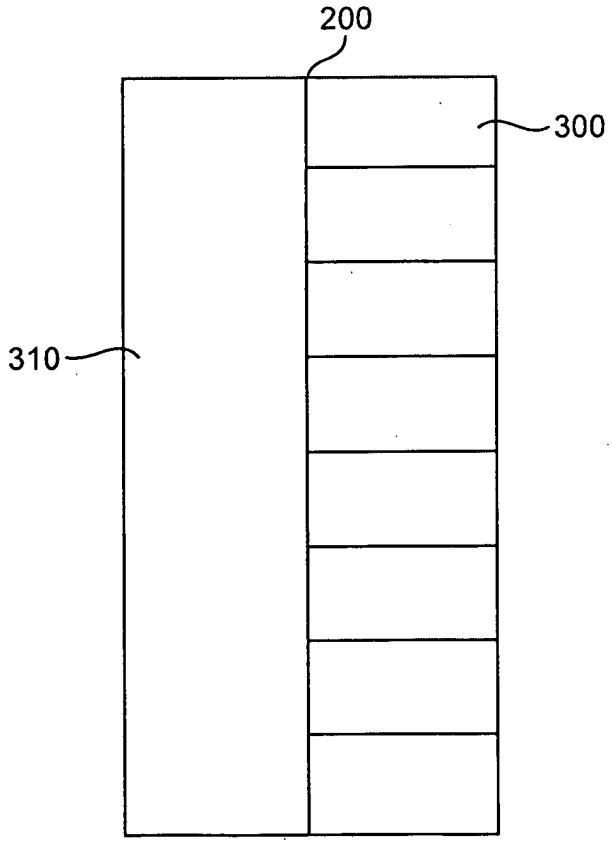

FIG. 3

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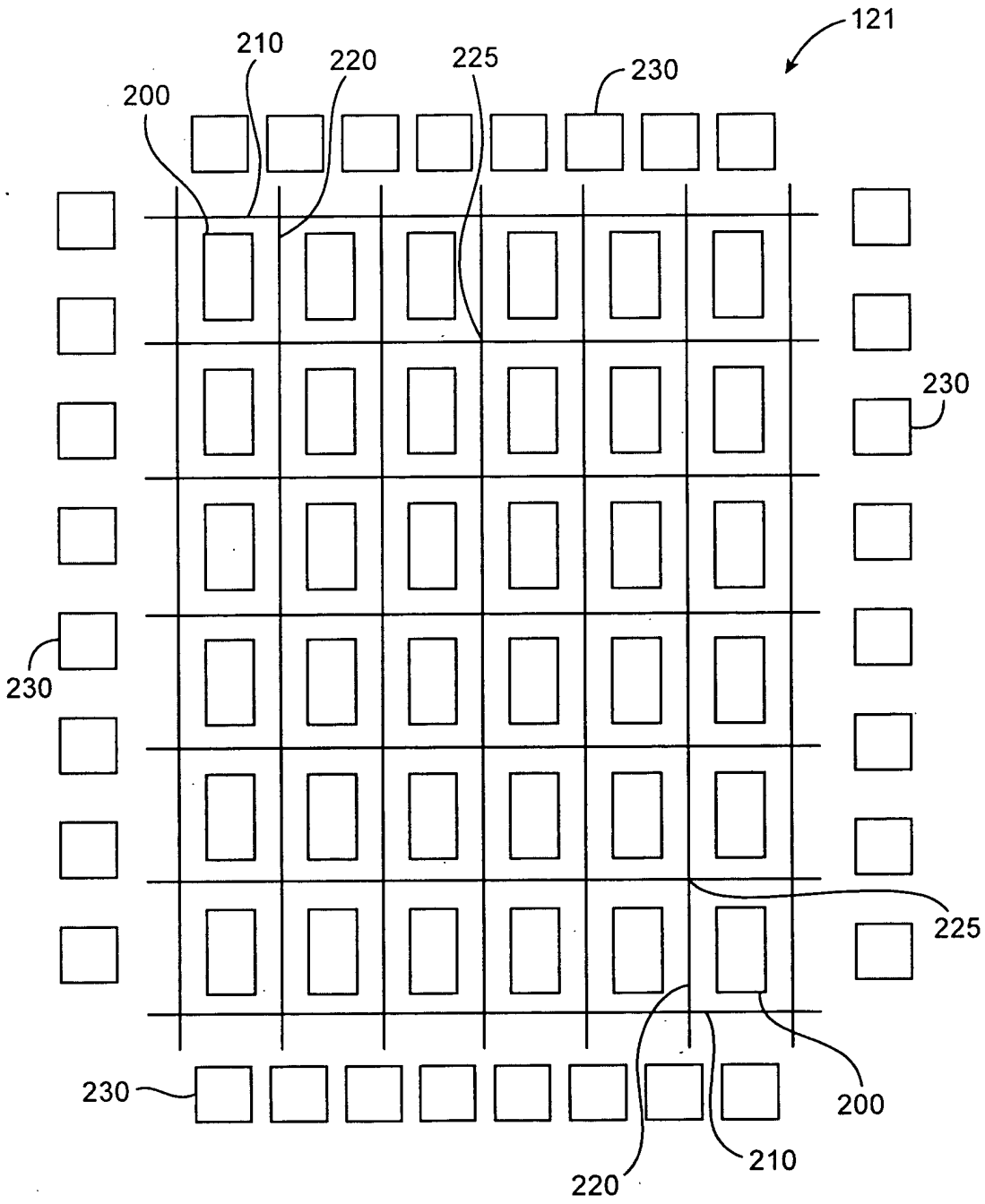

FIG. 2

OIPE JC161
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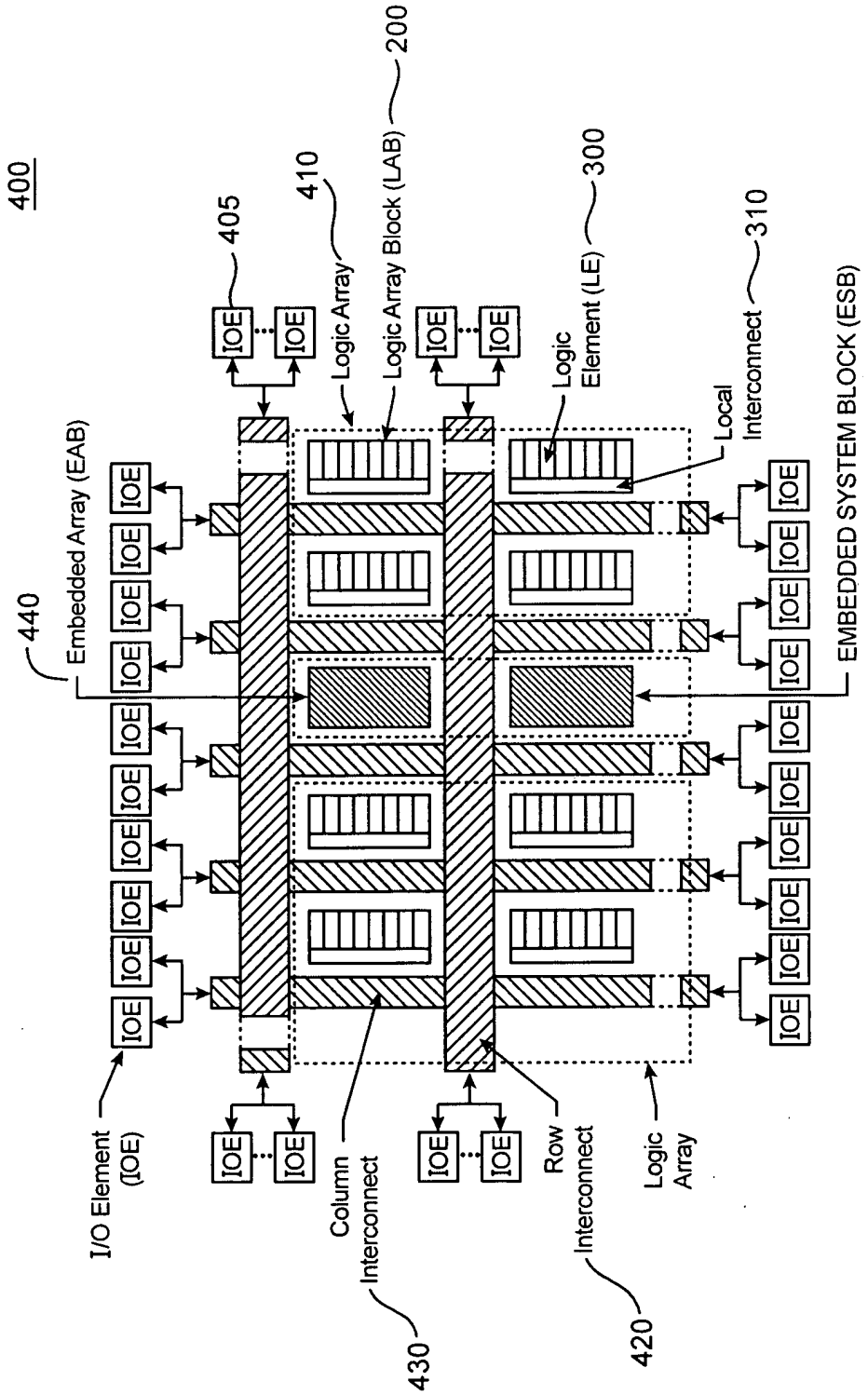

FIG. 4

OIPE JC161 APR 2 8 2004 PATENT & TRADEMARK OFFICE

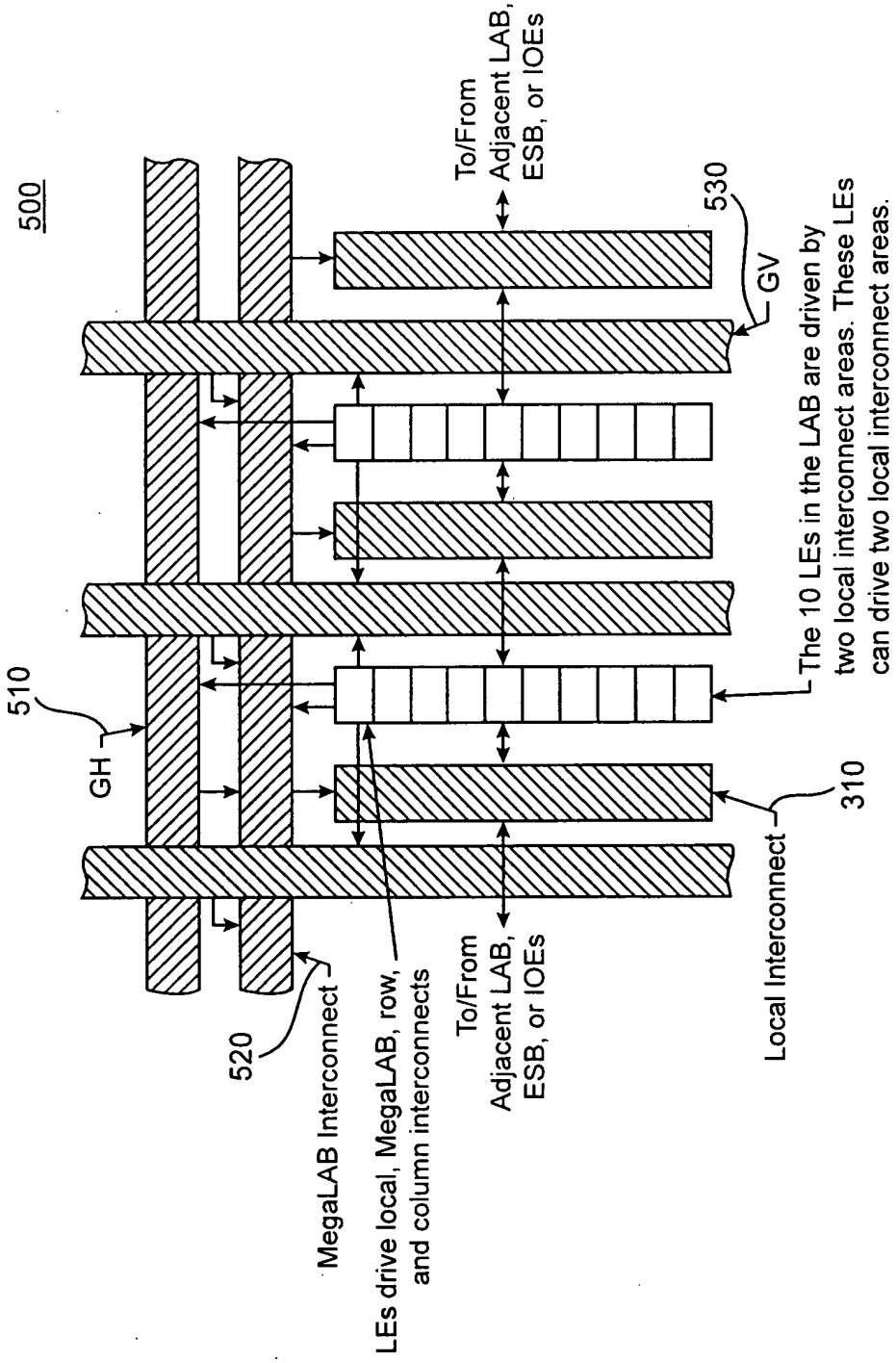

FIG. 5

OIPE JC161 APR 2 8 2004 PATENT & TRADEMARK OFFICE

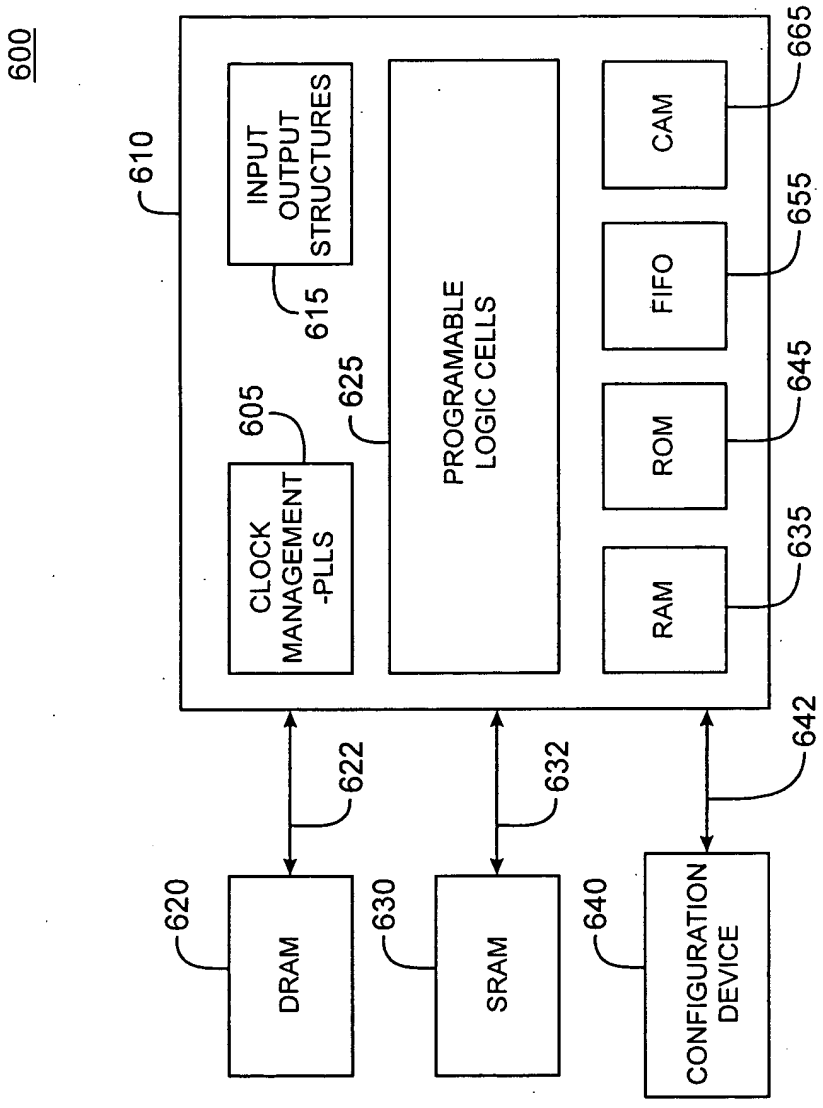

FIG. 6

OIPE JC161 APR 2 8 2004 PATENT & TRADEMARK OFFICE

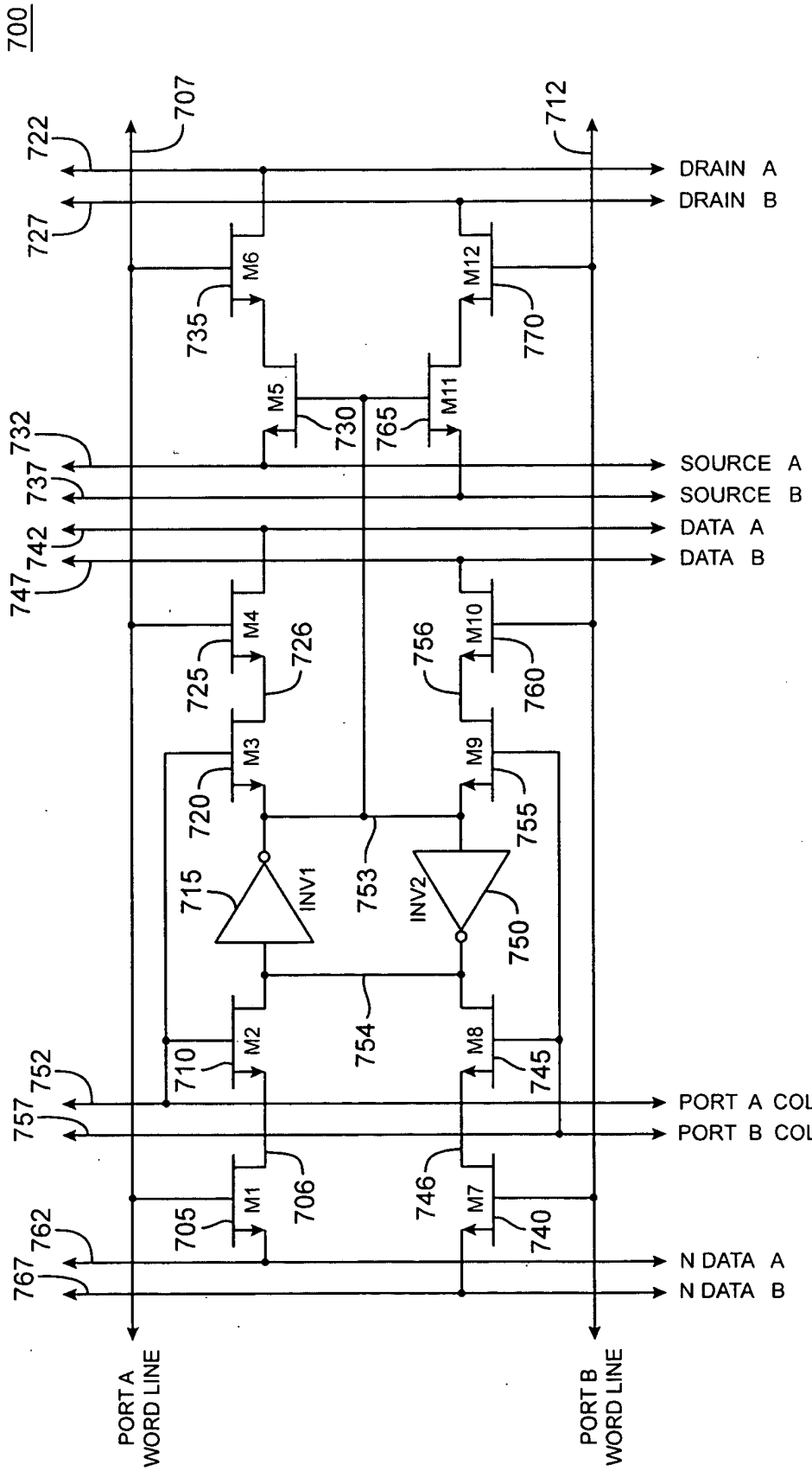

FIG. 7

OIPE
APR 2 8 2004
PATENT

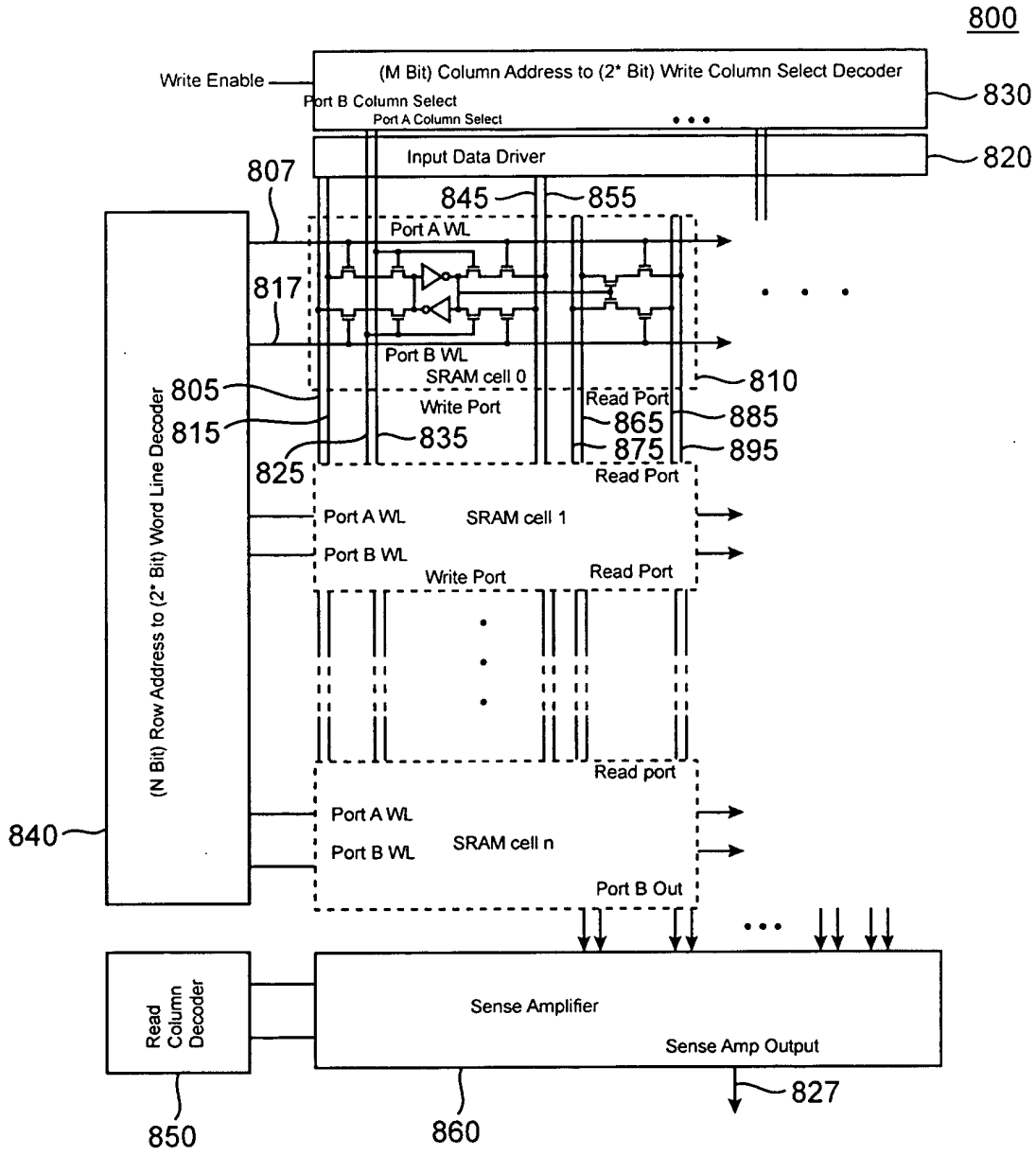

FIG. 8

OIPE JC181 APR 2 8 2004 PATENT & TRADEMARK OFFICE

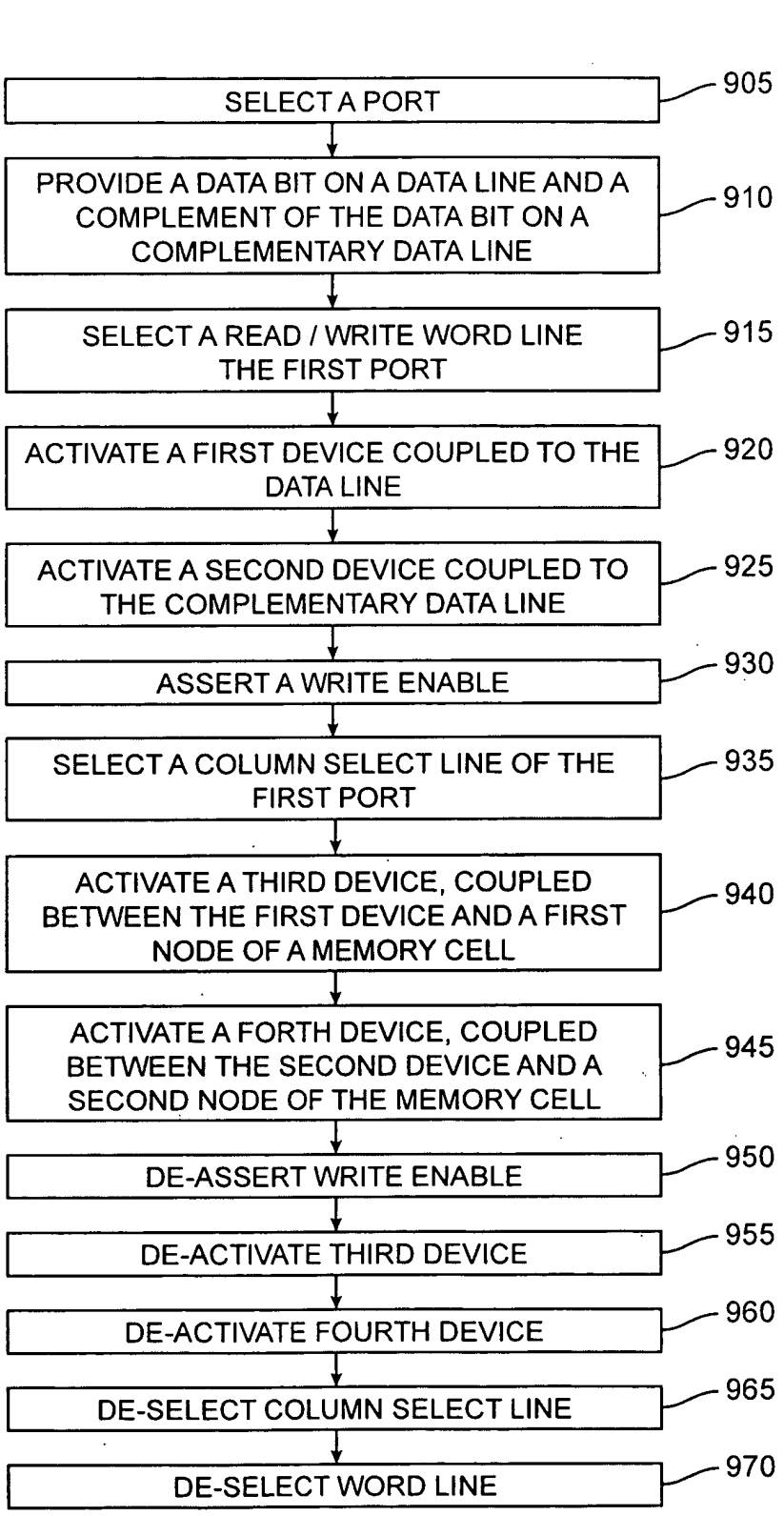

FIG. 9

OIPE JC181
APR 2 8 2004
PATENT & TRADEMARK OFFICE

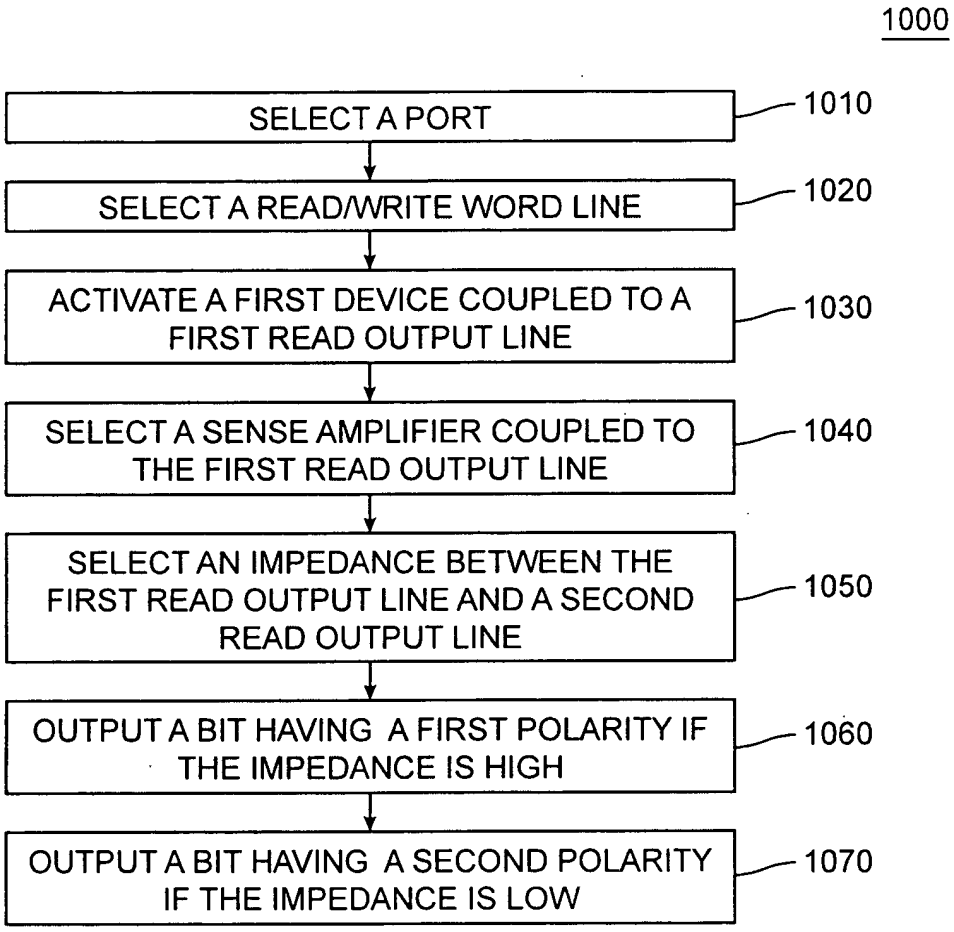

FIG. 10

OIPE
APR 2 8 2004
PATENT & TRADEMARK OFFICE
1810

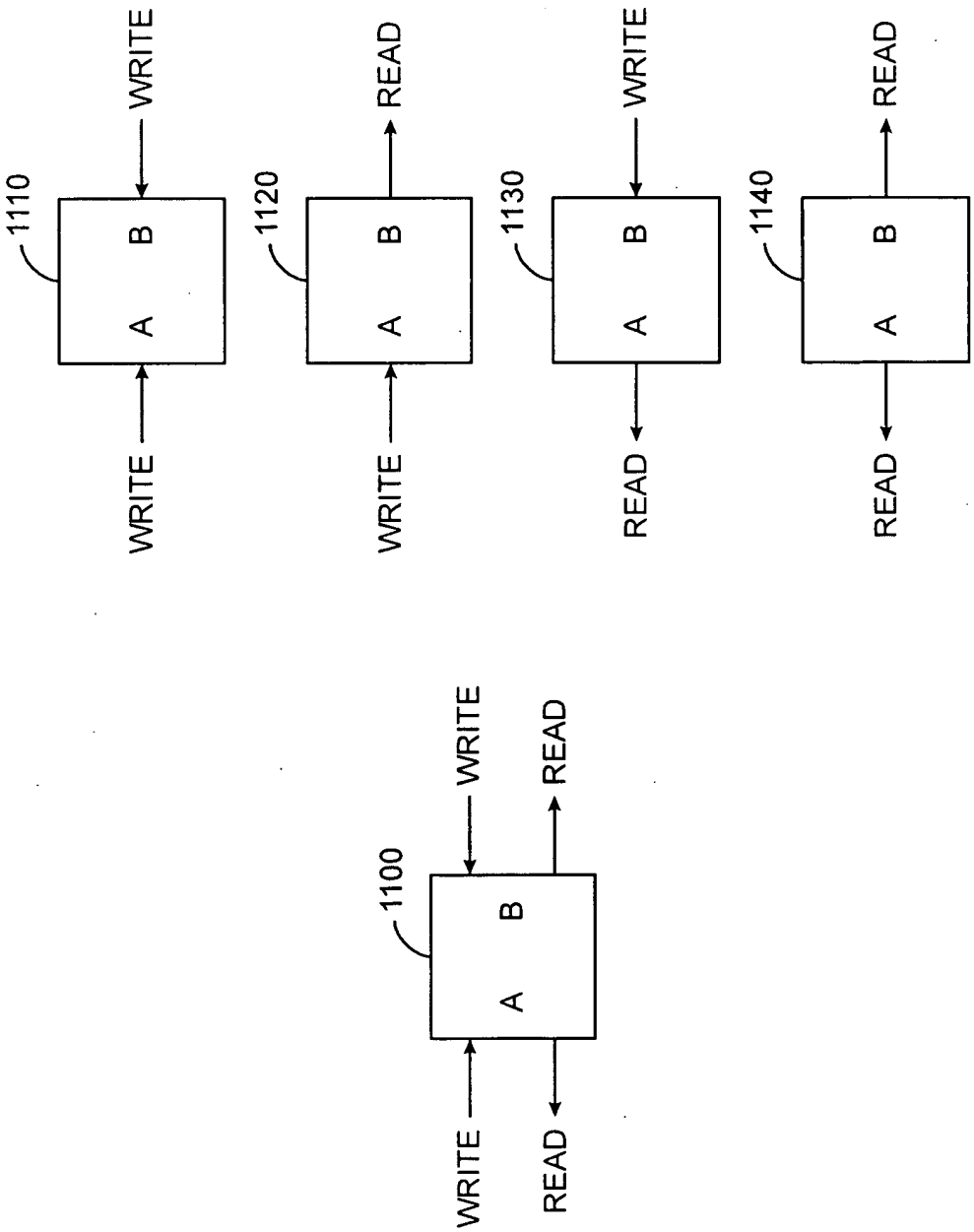

FIG. 11

OIPE JC181
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PATENT & TRADEMARK OFFICE

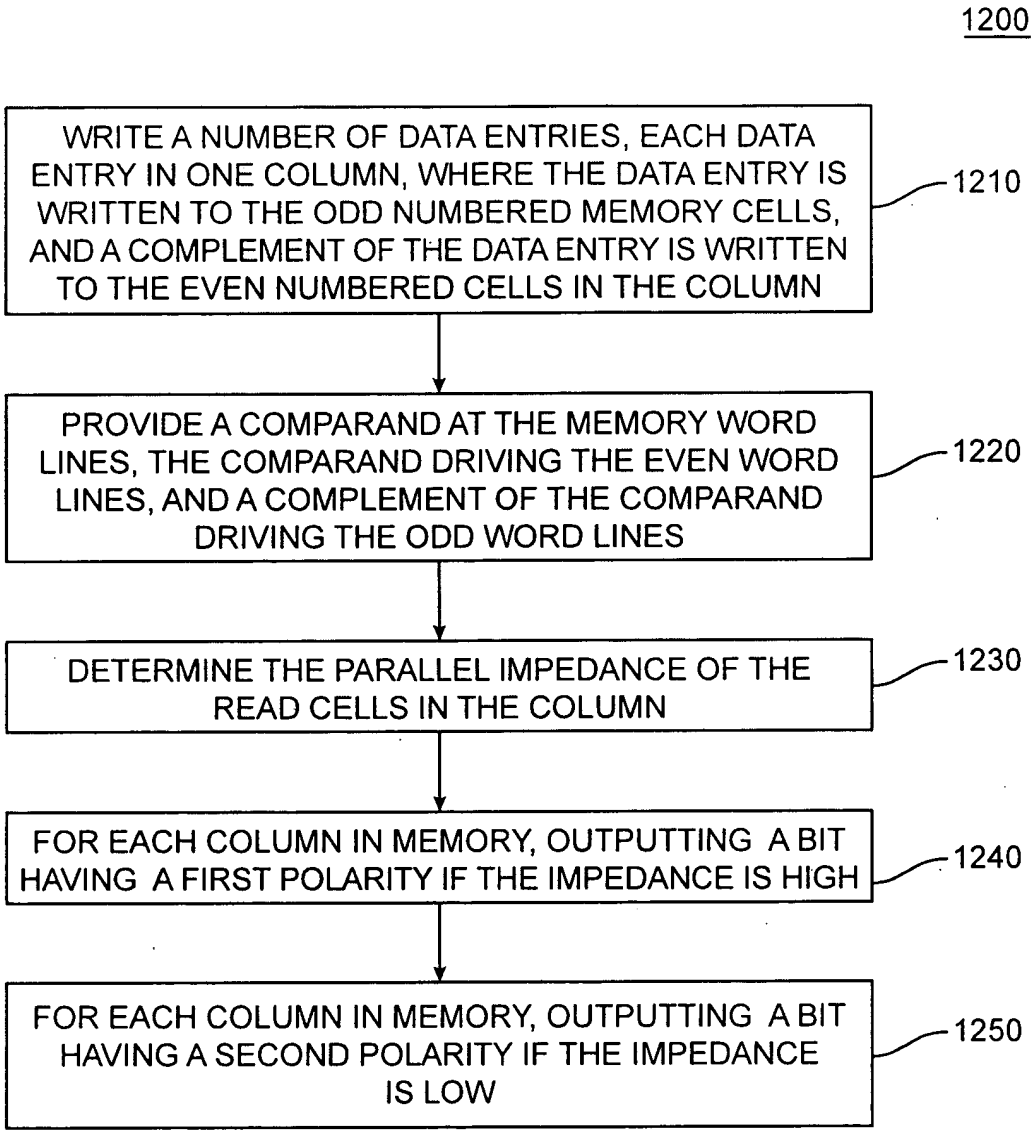


FIG. 12

OIPE JC181
APR 28 2004
PATENT & TRADEMARK OFFICE

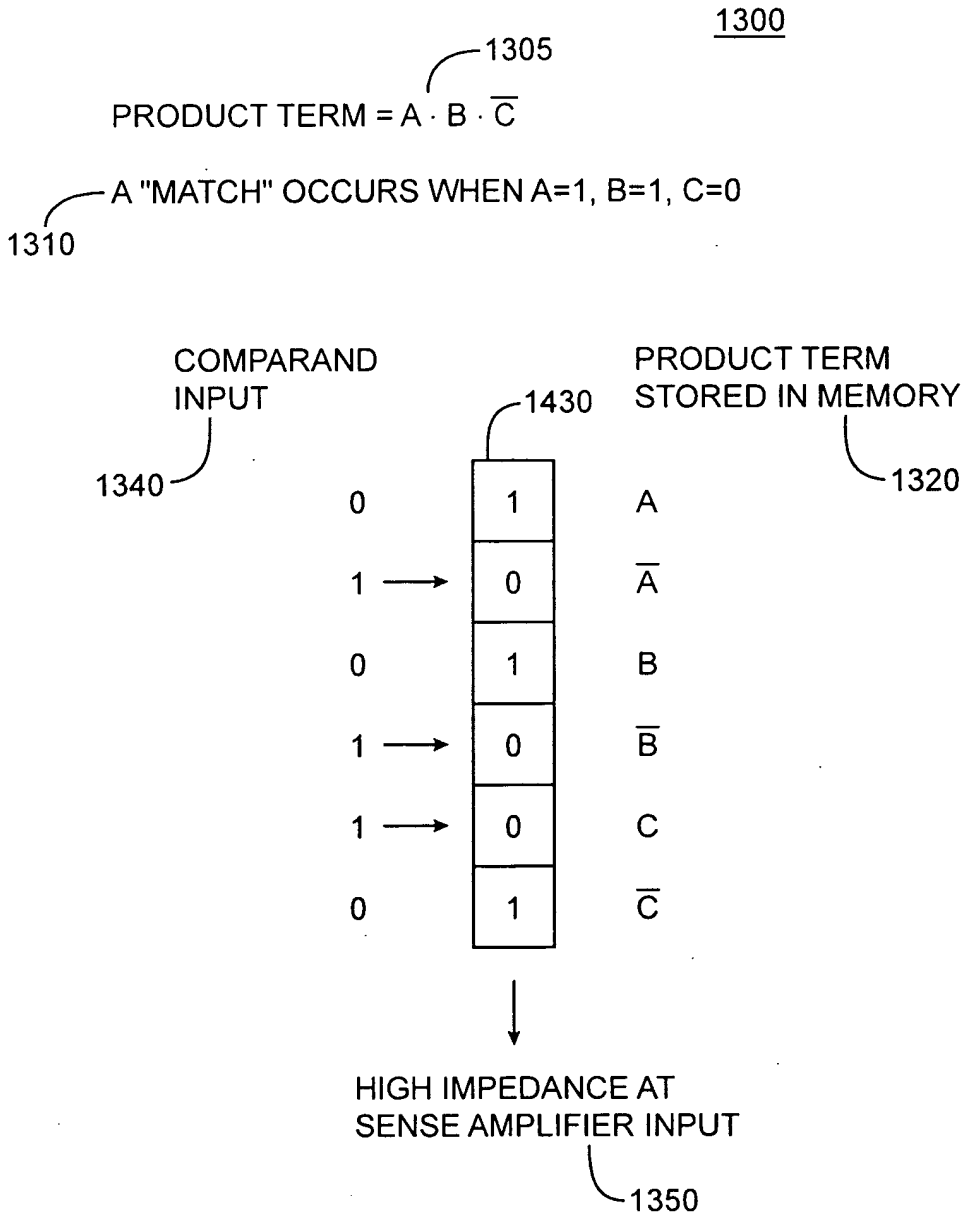


FIG. 13

OIPE JC161 APR 28 2004 PATENT & TRADEMARK OFFICE

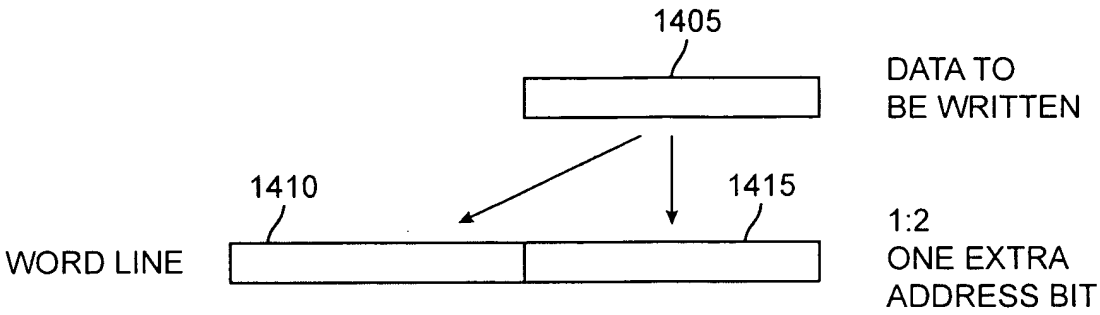


FIG. 14A

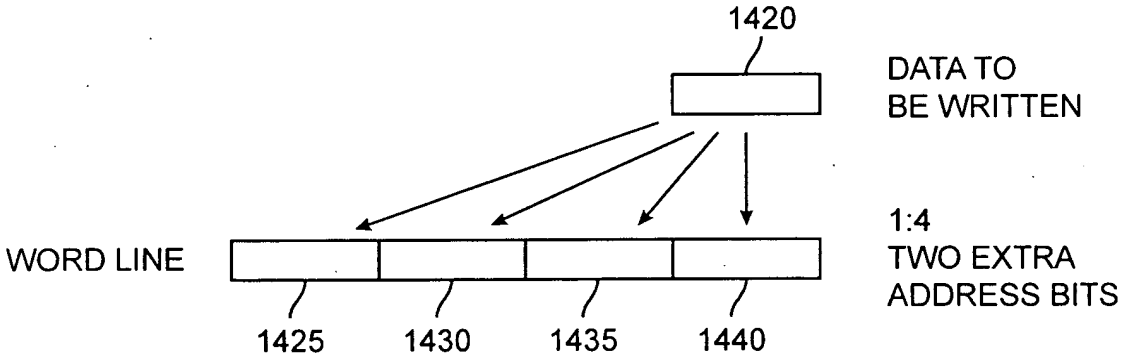


FIG. 14B

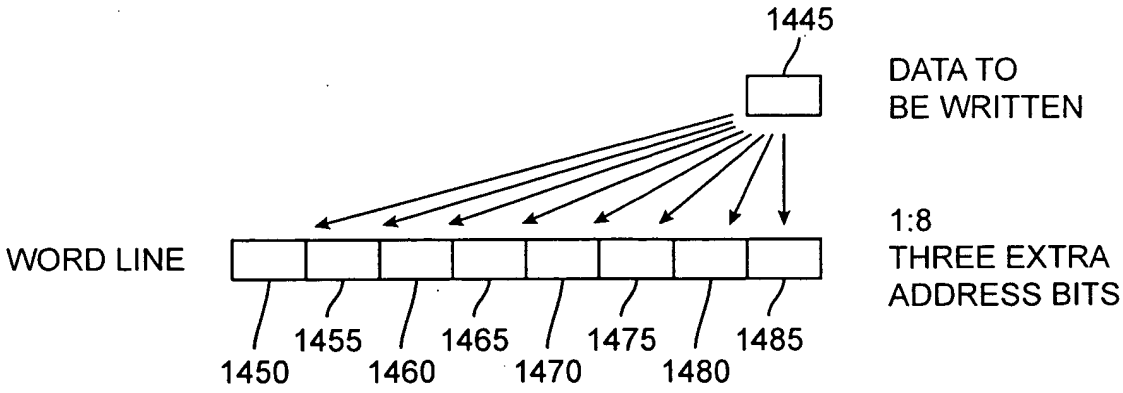


FIG. 14C

OIPE JC16
APR 28 2004
PATENT & TRADEMARK OFFICE

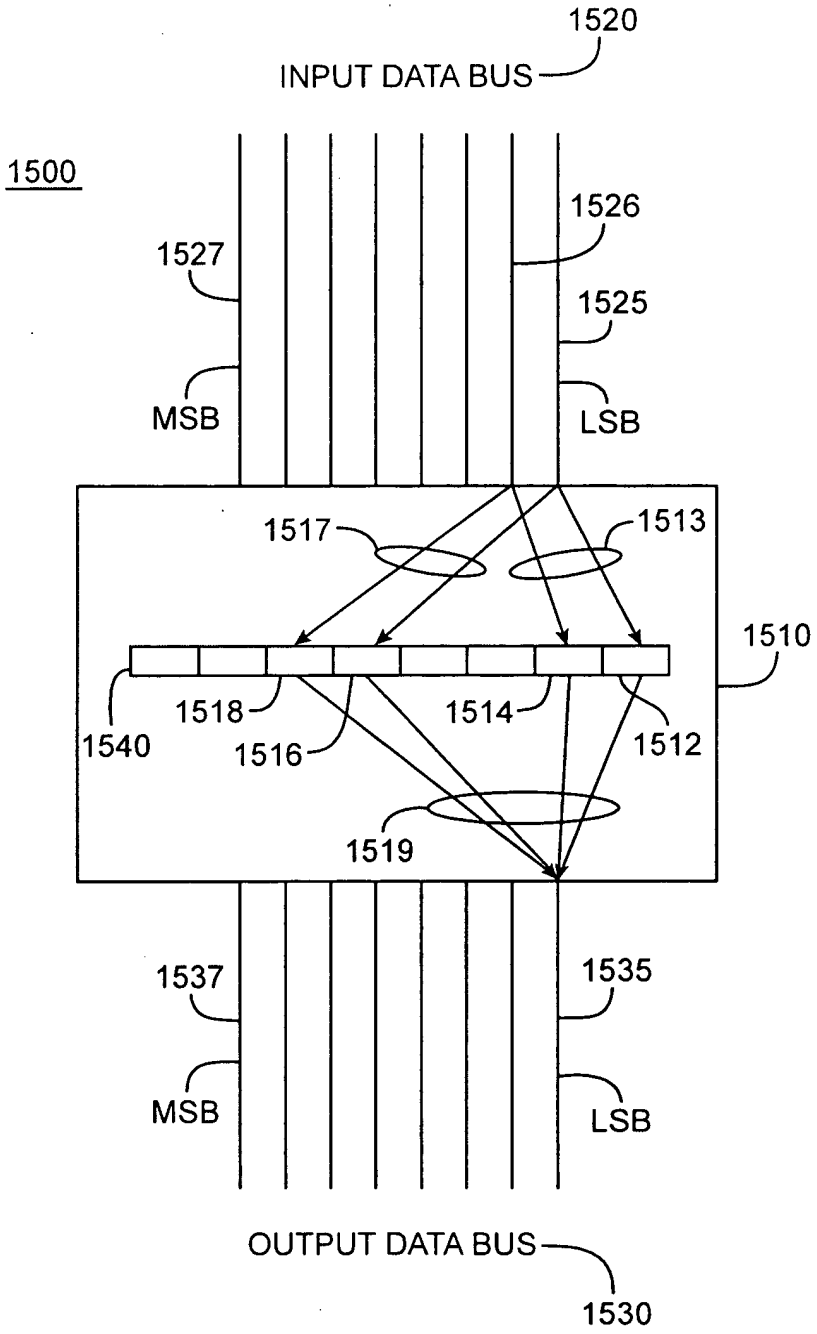


FIG. 15

OIPE JC181 APR 2 8 2004 PATENT & TRADEMARK OFFICE

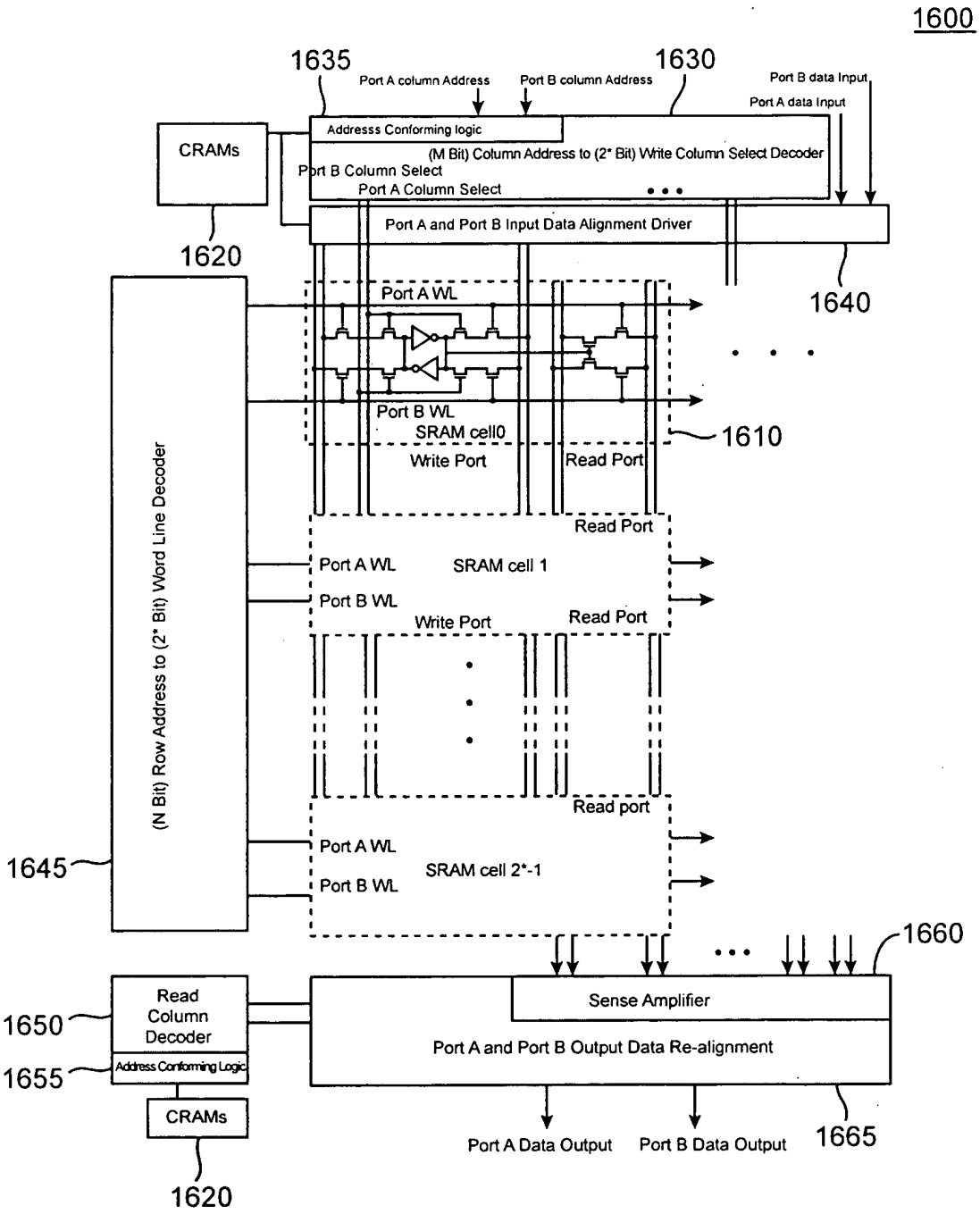


FIG. 16

OIPE JC181
APR 2 8 2004
PATENT & TRADEMARK OFFICE

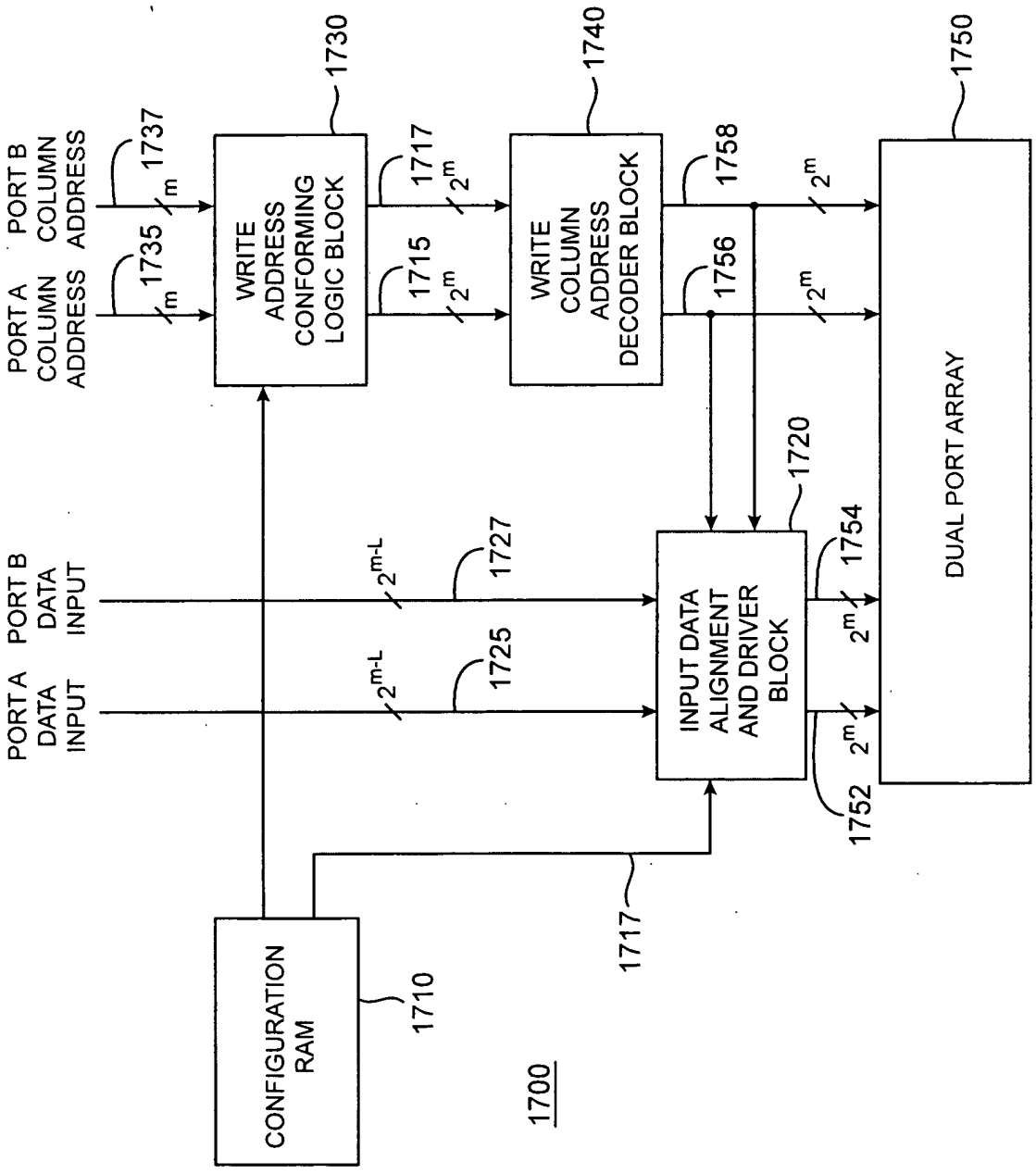


FIG. 17

OIPE JC16
APR 2 8 2004
PATENT & TRADEMARK

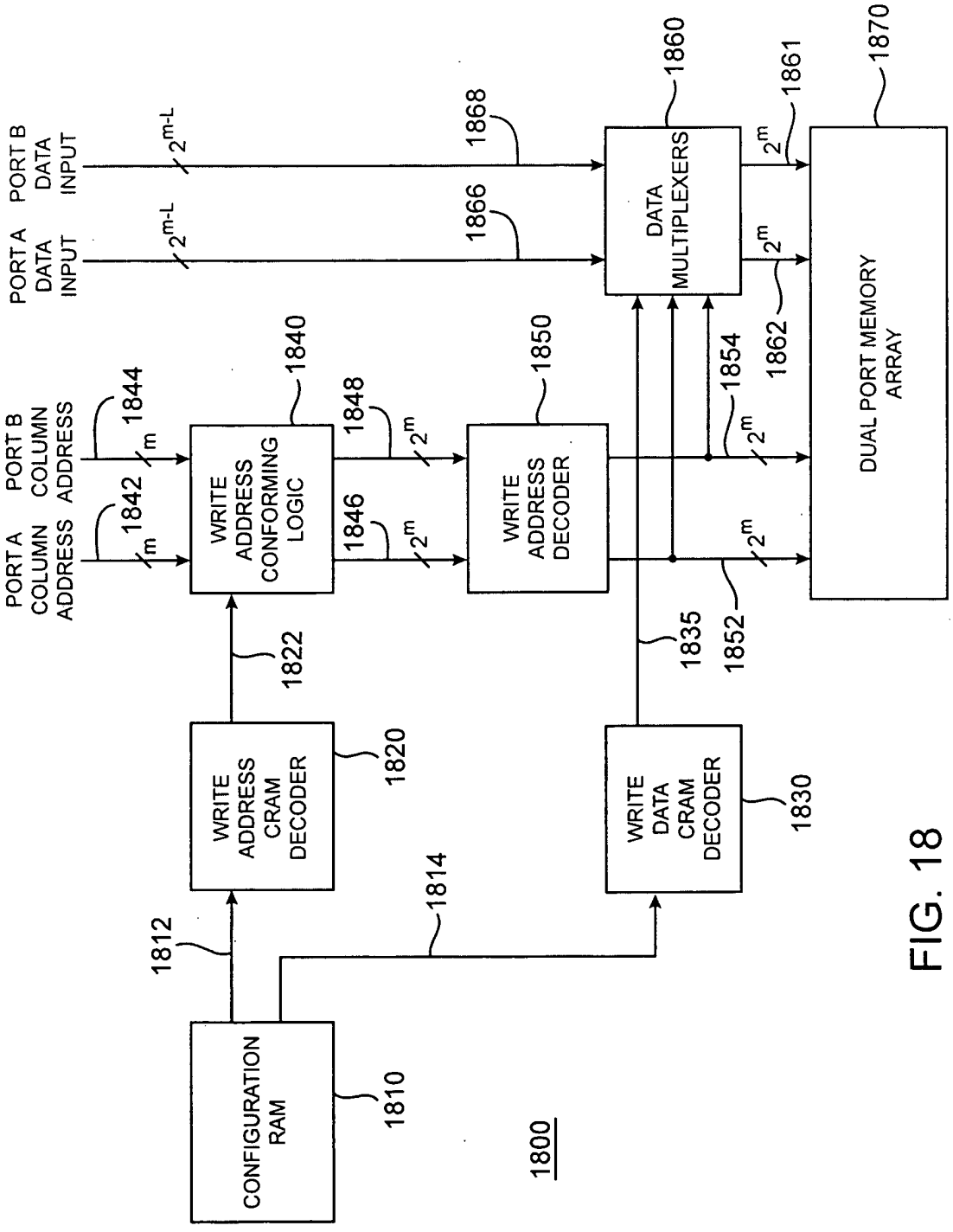


FIG. 18

OIPE
APR 2 8 2004
PATENT & TRADEMARK OFFICE

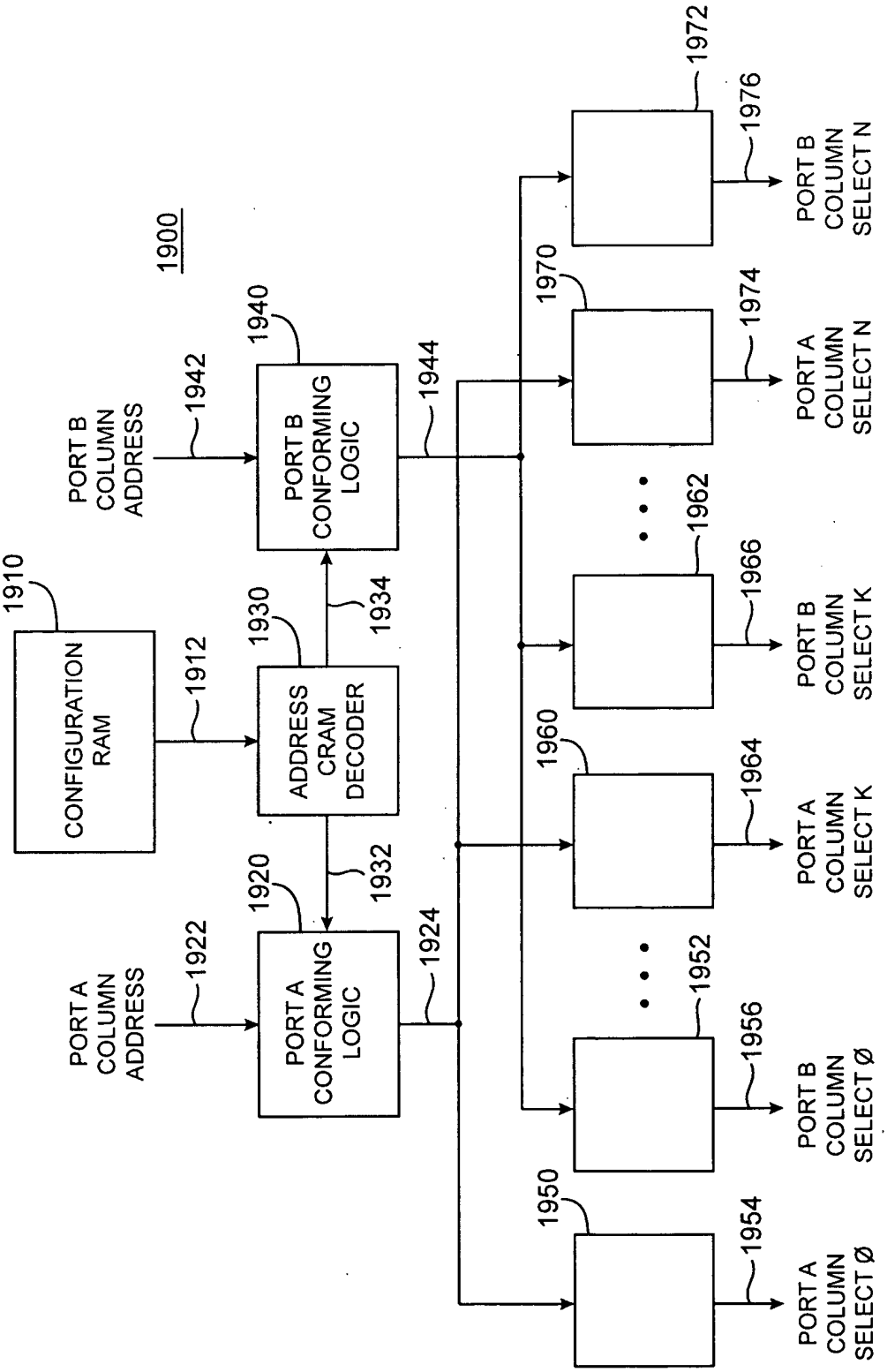


FIG. 19

OIPE JC161 APR 2 8 2004 PATENT & TRADEMARK OFFICE

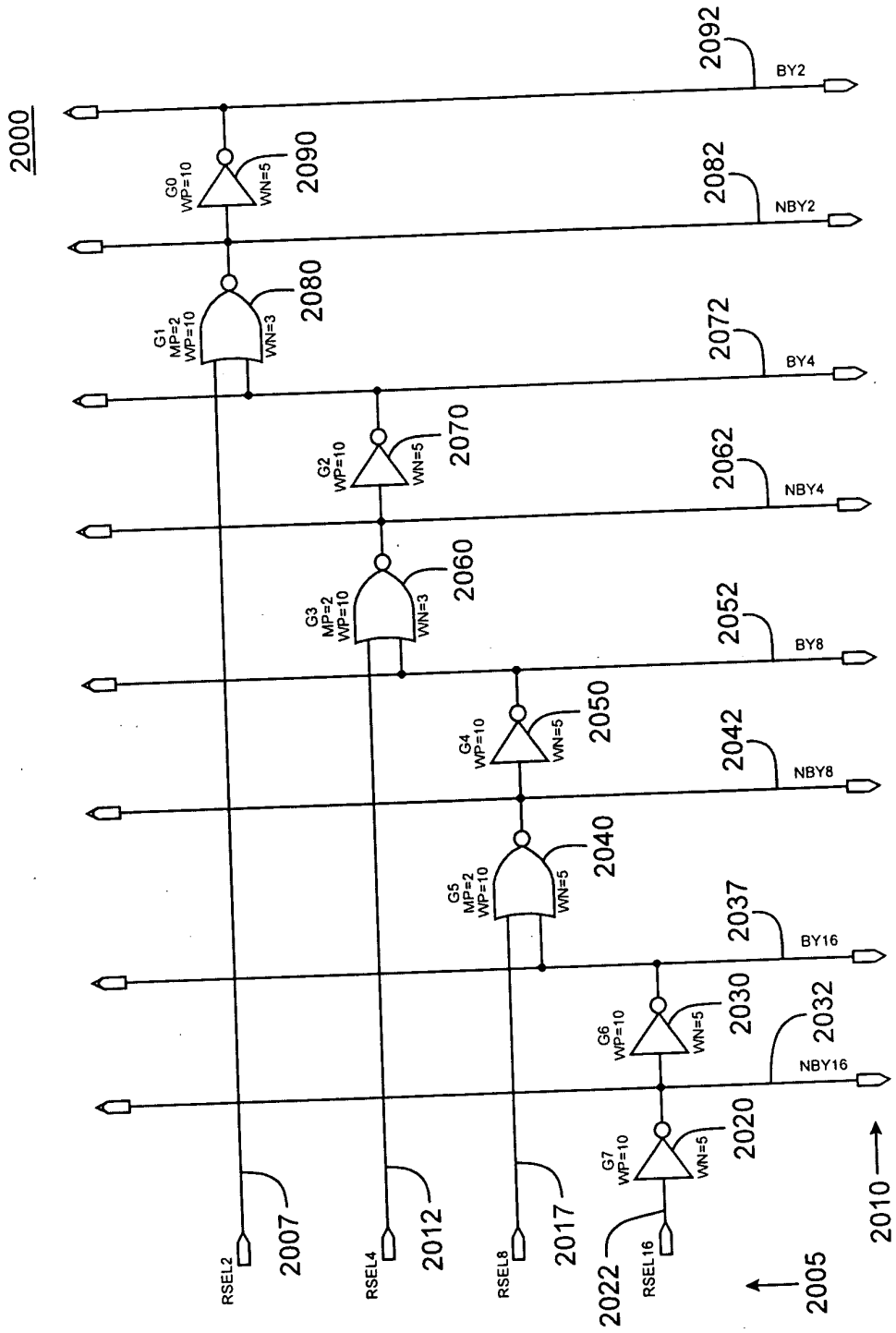


FIG. 20

OIPE JC161 APR 2 8 2004 PATENT & TRADEMARK OFFICE

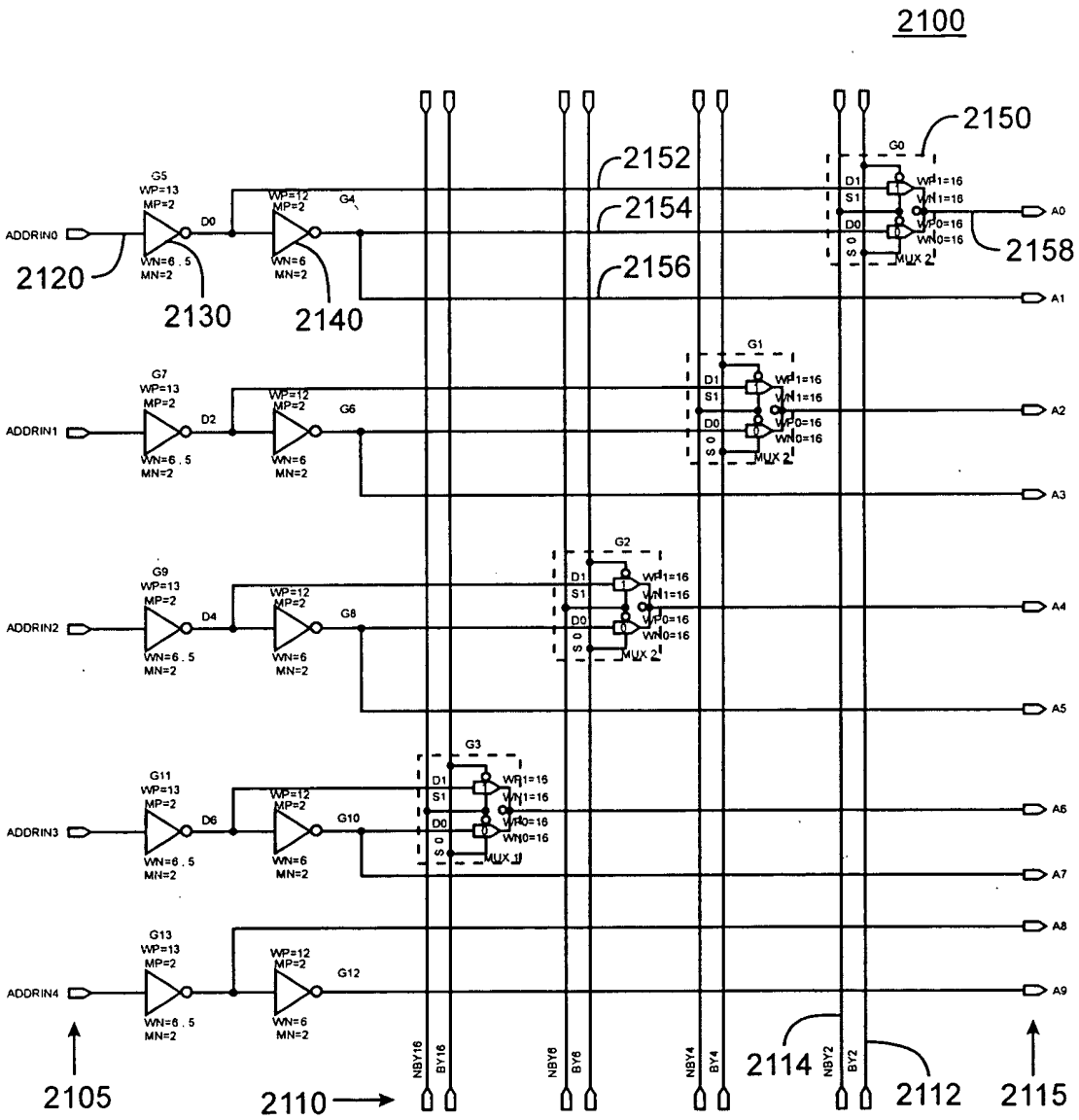
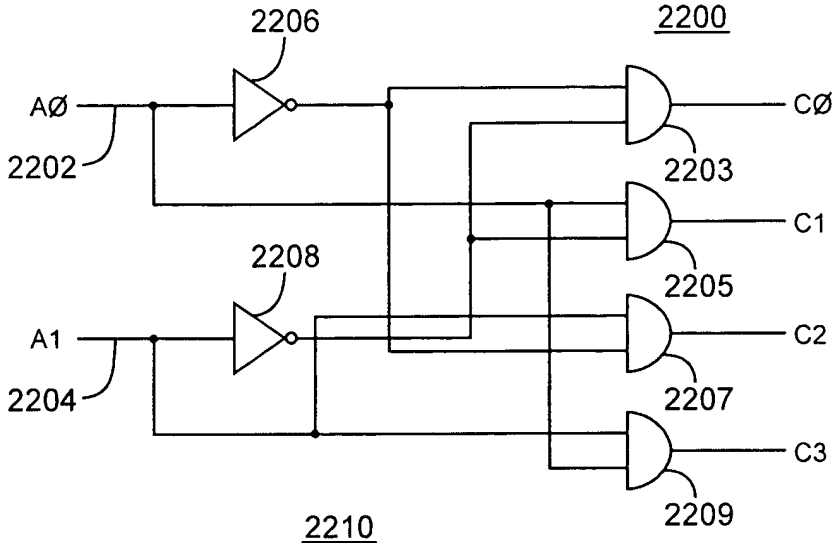


FIG. 21

OIPE JC181
APR 2 8 2004
PATENT & TRADEMARK OFFICE

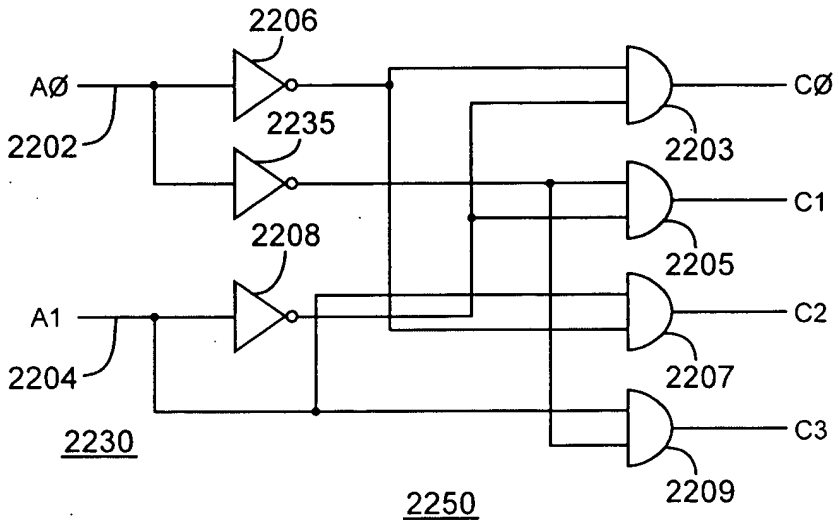


2210

A1	AØ	CØ	C1	C2	C3
0	0	1	0	0	0
0	1	0	1	0	0
1	0	0	0	1	0
1	1	0	0	0	1

2220

$C\emptyset = \overline{A1} \cdot \overline{A\emptyset}$
$C1 = \overline{A1} \cdot A\emptyset$
$C2 = A1 \cdot \overline{A\emptyset}$
$C3 = A1 \cdot A\emptyset$



2240

$C\emptyset = \overline{A1} \cdot \overline{A\emptyset}$
$C1 = \overline{A1} \cdot \overline{A\emptyset}$
$C2 = A1 \cdot \overline{A\emptyset}$
$C3 = A1 \cdot \overline{A\emptyset}$

2250

A1	AØ	CØ	C1	C2	C3	
0	0	1	1	0	0	2252
0	1	0	0	0	0	2254
1	0	0	0	1	1	2256
1	1	0	0	0	0	2258

FIG. 22

OIPE JC181
APR 28 2004
PATENT & TRADEMARK OFFICE

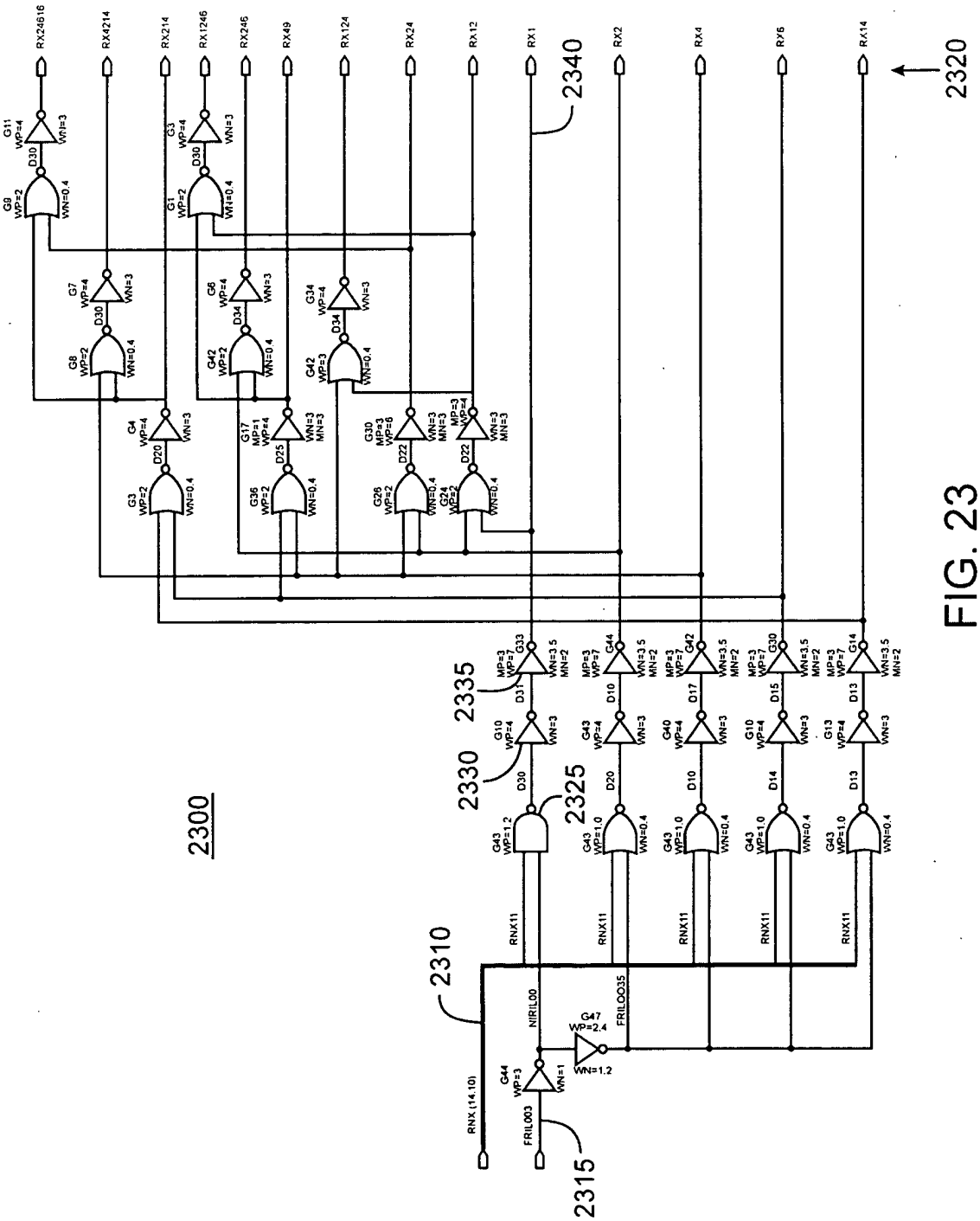
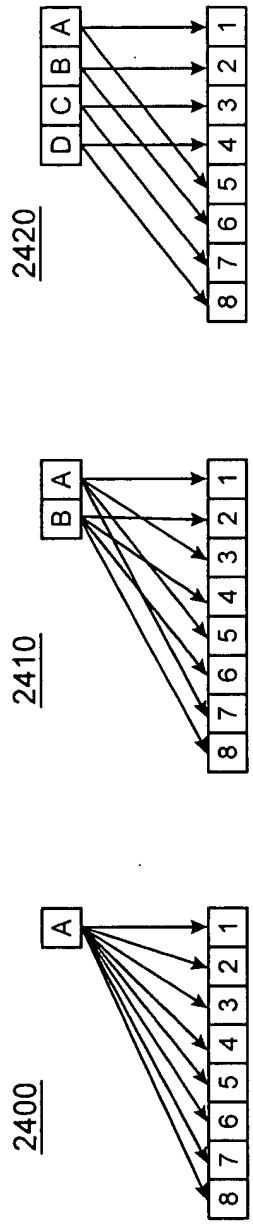


FIG. 23

OIPE JC181
APR 28 2004
PATENT



2430

2432 MUX	2434 # bits / word 1	2	4	2436 INPUTS	2438 TYPE MUX
1	A	A	A	A	1:1
2	A	B	B	A,B	2:1
3	A	A	C	A,C	2:1
4	A	B	D	A,B,D	3:1
5	A	A	A	A	1:1
6	A	B	B	A,B	2:1
7	A	A	C	A,C	2:1
8	A	B	D	A,B,D	3:1

2440

2442 MUX	2444 OUTPUTS	2446 TYPE MUX
A	8,7,6,5,4,3,2,1	1:8
B	8,6,4,2	1:4
C	7,3	1:2
D	8	1:1

FIG. 24

OIPE JC181
APR 28 2004
PATENT & TRADEMARK OFFICE

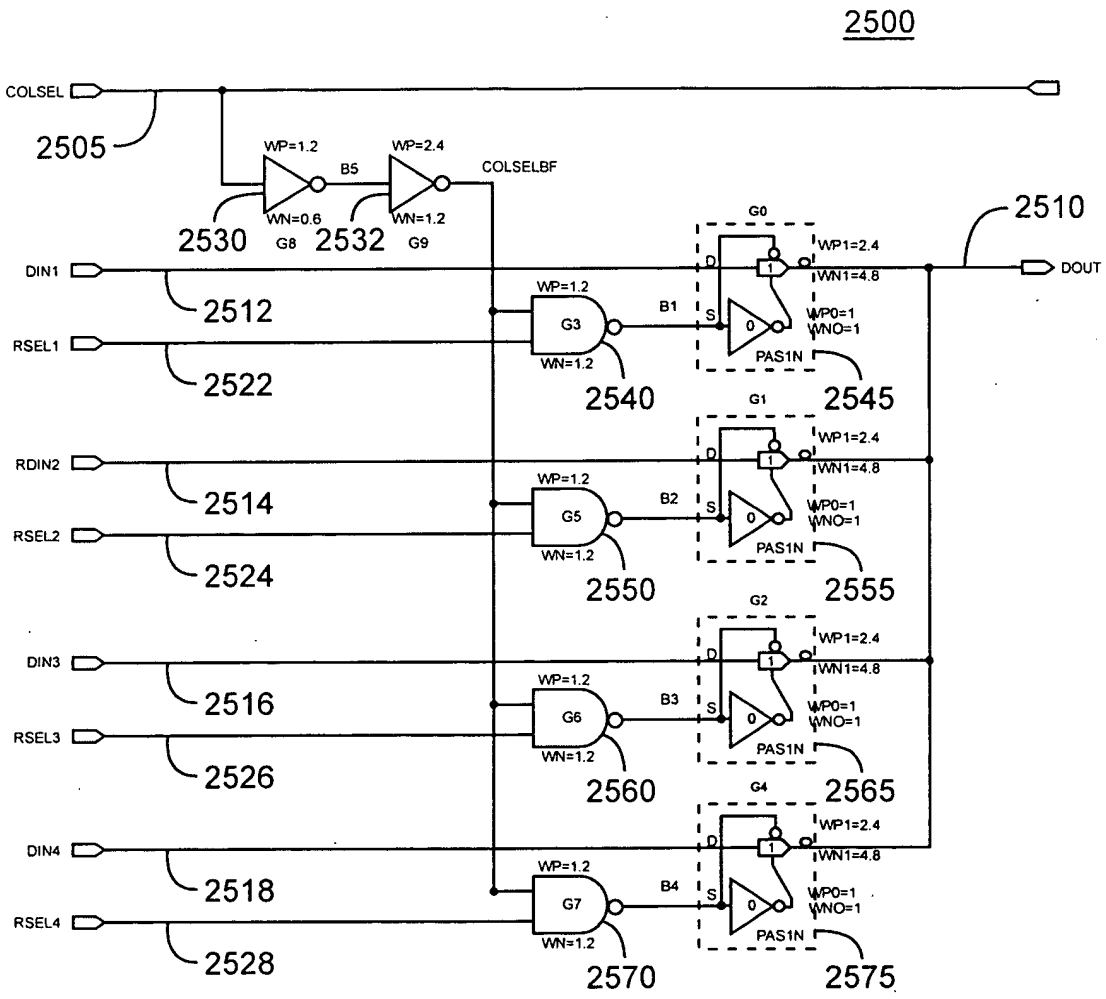


FIG. 25

OIPE JC181
APR 28 2004
PATENT & TRADEMARK OFFICE

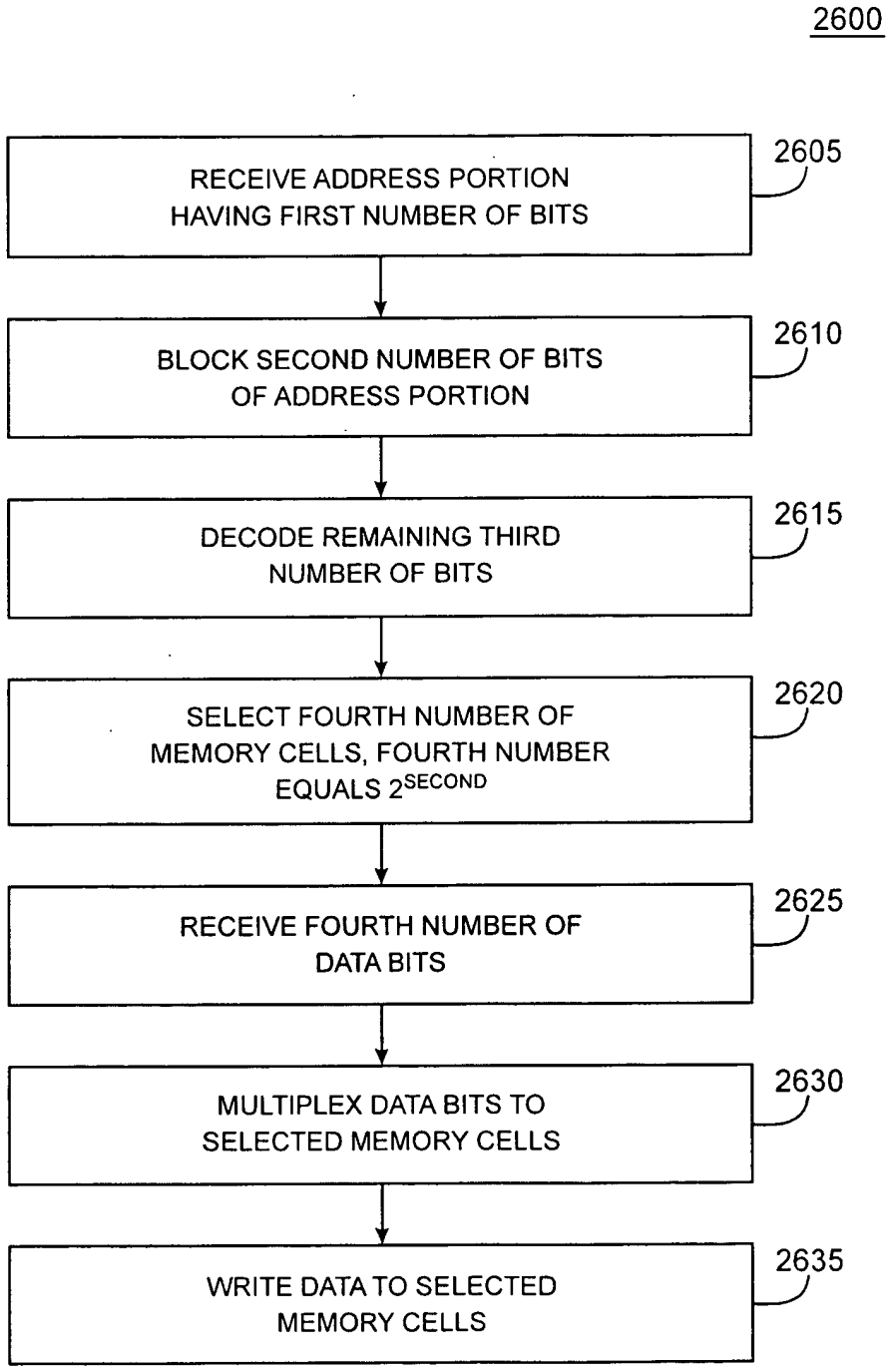


FIG. 26

APR 28 2004
PATENT & TRADEMARK OFFICE

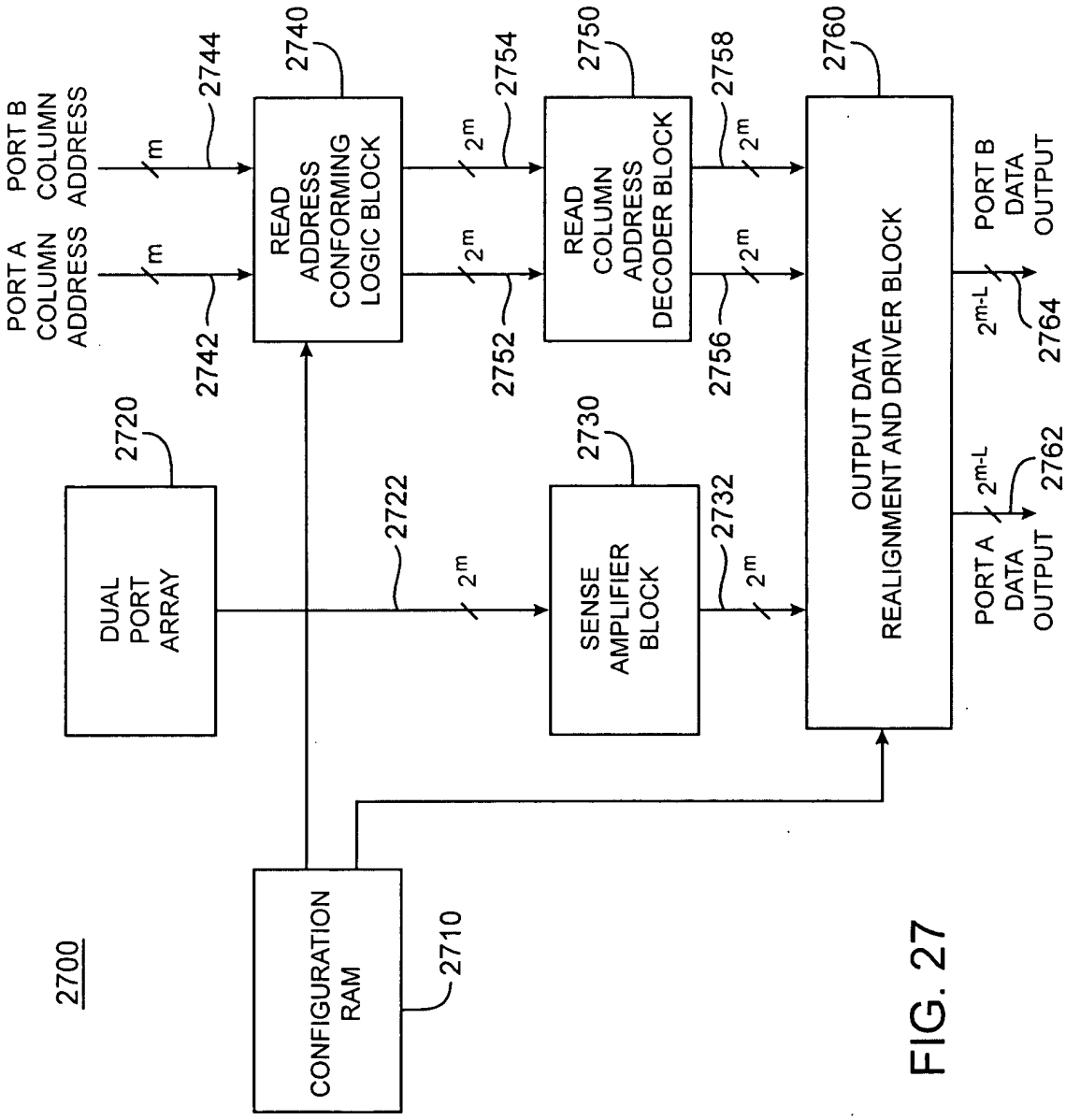


FIG. 27

APR 28 2004
PATENT & TRADEMARK OFFICE

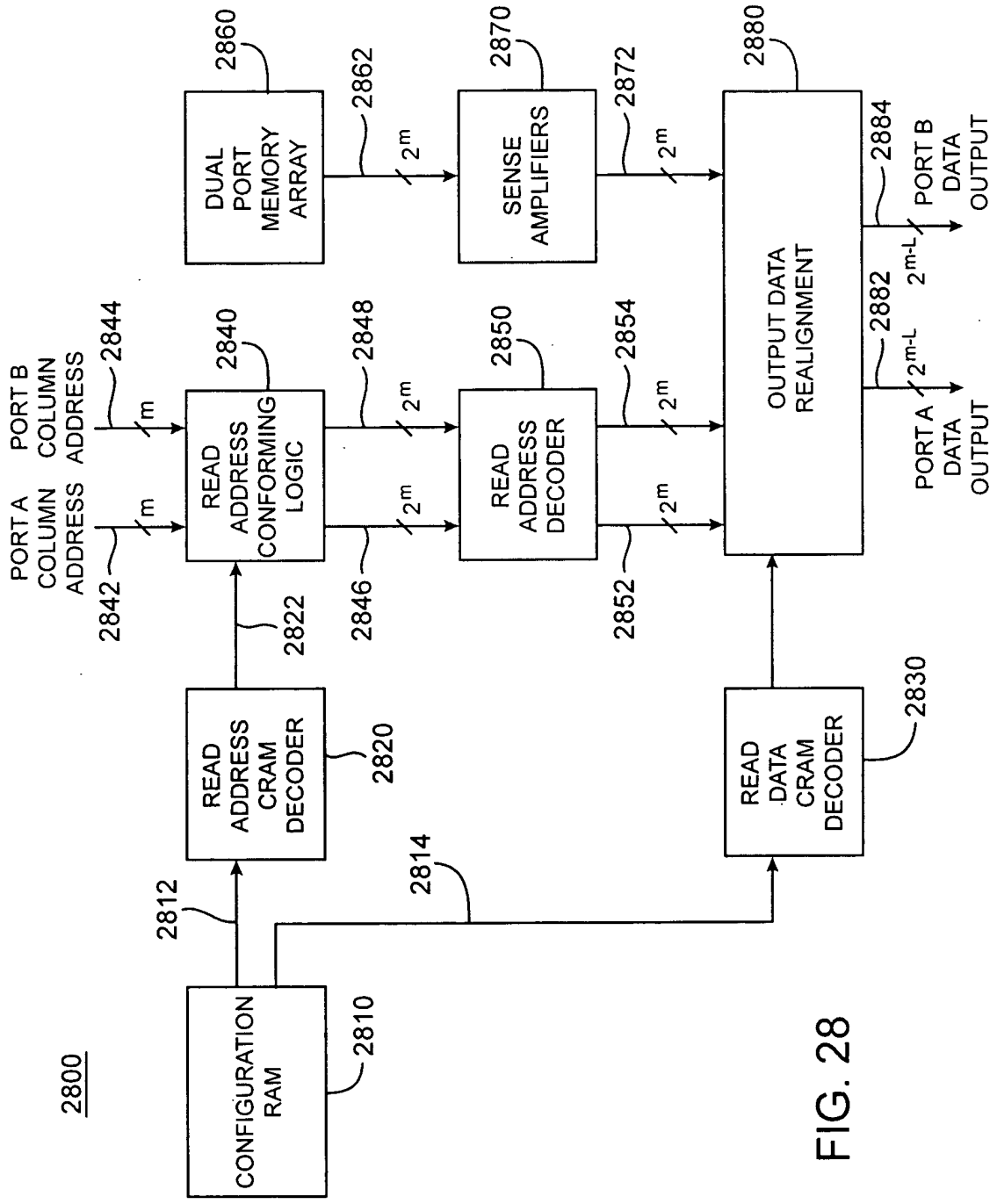
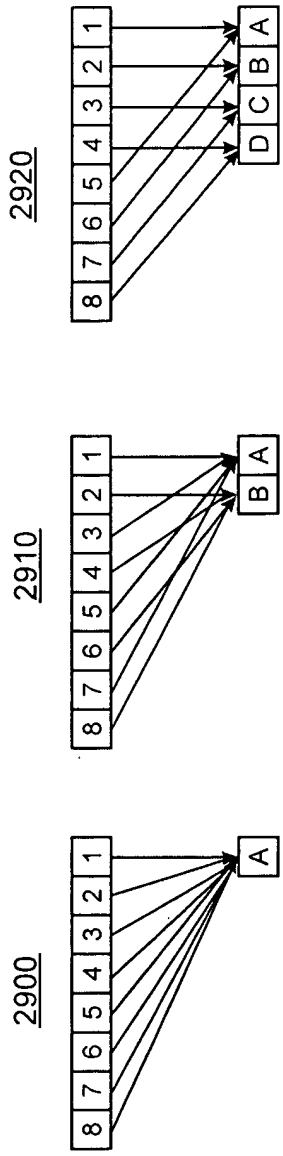


FIG. 28

OIPE
APR 28 2004
PATENT & TRADEMARK OFFICE



2930

MUX (2932)	# bits / word (2934) 1	2	4	INPUTS (2936)	TYPE MUX (2938)
1	A	A	A	A	1:1
2	A	B	B	A,B	1:2
3	A	A	C	A,C	1:2
4	A	B	D	A,B,D	1:3
5	A	A	A	A	1:1
6	A	B	B	A,B	1:2
7	A	A	C	A,C	1:2
8	A	B	D	A,B,D	1:3

2940

MUX (2942)	INPUTS (2944)	TYPE MUX (2946)
A	8,7,6,5,4,3,2,1	8:1
B	8,6,4,2	4:1
C	7,3	2:1
D	8	1:1

FIG. 29

OIPE JC181
APR 28 2004
PATENT & TRADEMARK OFFICE

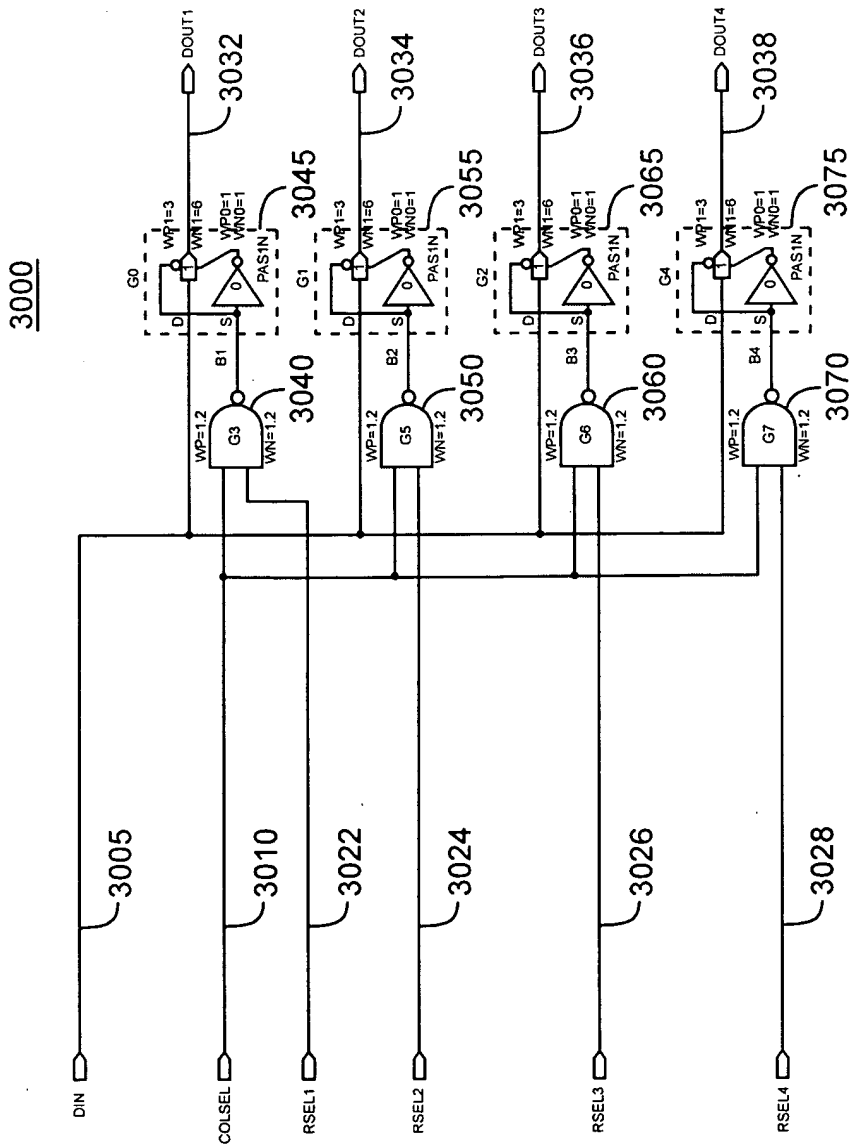


FIG. 30

OIPE JC181
APR 28 2004
PATENT & TRADEMARK OFFICE

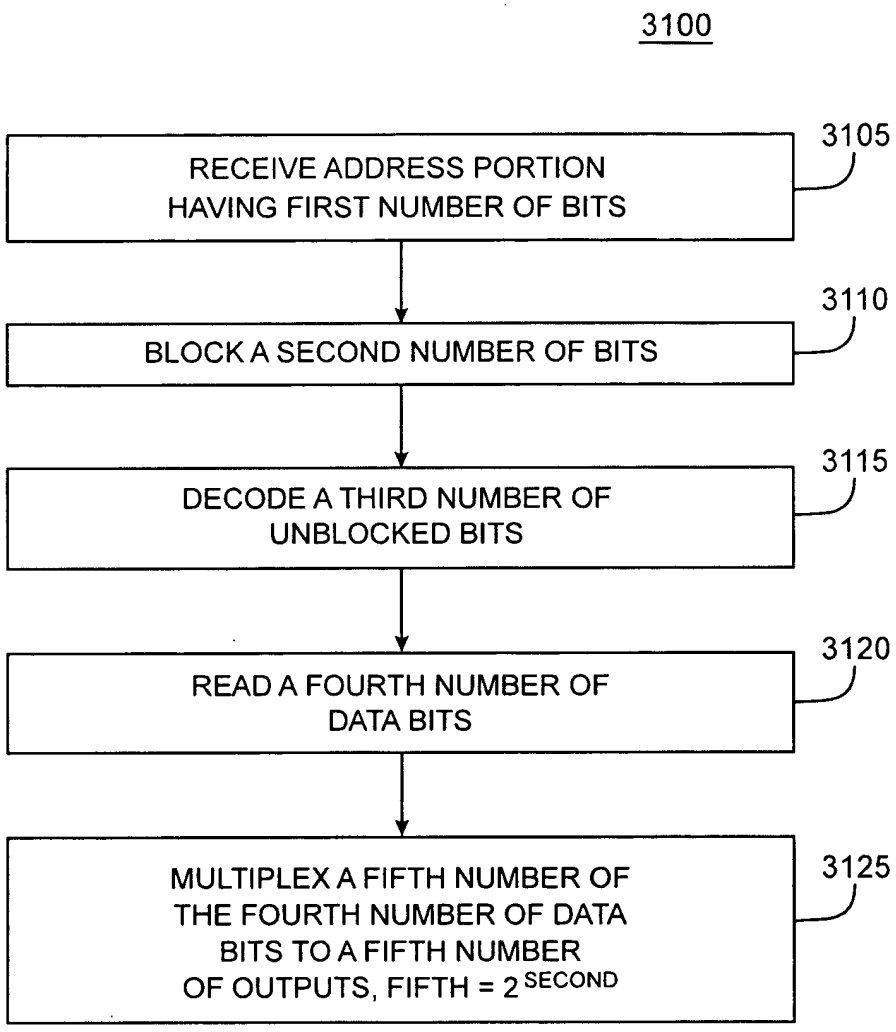


FIG. 31